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#### Rochester Institute of Technology

School of Interactive Games and Media 152 Lomb Memorial Drive Rochester, NY 14623

## IGME 601: Game Development Processes

# Fall 2018 Course Syllabus

Section 01 - Orange Hall 1370 TR 2 - 3:15pm

Please read this document carefully and save it for future reference. It provides the context and structure which will guide all aspects of this course. Detailed schedule and assignment information will be provided via myCourses (http://www.mycourses.rit.edu).

#### Instructor Information

Professor Name: Erika Mesh
Email Address: esmvcs@rit.edu

Office Location: Golisano Hall 2573 (2<sup>nd</sup> floor)
Office Hours: Mondays and Fridays, 9 – 10:30am

Tuesdays, 10:30 – 11:30am

Also available by appointment

#### Course Information

Course Number: IGME 601

**Course Name:** Game Development Processes

Credits: 3 credits

# Course Description

This course examines the individual and group roles of the development process model within the game design and development industry. Students will transform design document specifications into software and hardware needs for developers, testers, and end users. Students will examine team dynamics and processes for technical development, content development, testing, deployment, and maintenance. Students will explore the design process through the deconstruction of the game industry's software lifecycle model.

# Important RIT Deadlines

- Last day of add/drop is <u>September 4, 2018</u>.
- Last day to withdraw with a grade of "W" is November 9, 2018.
- NOTE: IGM department policy states that a student has one semester to challenge any grade. After that, grades cannot be challenged.

#### Texts and Materials

There is no required textbook for this course. Course topics will be addressed via a variety of resources (online book chapters, papers, videos, etc.) that will be linked from myCourses. Please be sure to keep current with the readings for the course.

Our MyCourses shell contains vital information such as readings, weekly assignments, code examples, supplemental materials, course notes, the dropbox system, and other useful items. It is your responsibility to log into MyCourses on a regular basis to check for additional materials and assignments.

## Course Topics Include (in no particular order):

- Agile principles
- Architecture & design
- Art & asset documentations
- Brainstorming
- Business & legal concerns
- Code reviews
- Critiques
- Domain/market analysis
- Game production overview
- Marketing
- Prototyping

- Ratings, localization, accessibility, ethical concerns, etc.
- Requirements definition
- Researching emerging trends
- Retrospectives
- Risk analysis
- Scrum
- Software process activities and models
- Team formation and communications
- Testing
- User considerations
- Version Control

# **Course Objectives**

By the end of this course, students will be able to

- Identify and describe software, hardware, and networking requirements for game software as part of the design and development process.
- Differentiate tools and processes required for effective group interactions within the development process.
- Analyze the game development lifecycle and will be able to determine the needs, requirements, and constraints of each phase.

#### Course Evaluation

Points	Letter Grade	Grade Points
>= 93.0	A	4.000
>= 90.0 & < 93.0	A-	3.667
>= 87.0 & < 90.0	B+	3.333
>= 83.0 & < 87.0	В	3.000
>= 80.0 & < 83.0	B-	2.667
>= 77.0 & < 80.0	C+	2.333
>= 73.0 & < 77.0	С	2.000
>= 70.0 & < 73.0	C-	1.667
>= 60.0 & < 70.0	D	1.000
< 60.0	F	0.000

## Course & Grade Organization

Your final course grade is a combination of your grades on the following course elements in the percentages shown:

Individual Assignments	<mark>30%</mark>
Final Exam	10%
Group Project *	60%

<sup>\*</sup> For team efforts, individual grades will be adjusted up or down based on individual contribution using evidence from peer evaluations and project artifacts. If at any time, you are concerned about your performance or progress in this course, you should not hesitate to contact your instructor and discuss it.

#### Individual Assignments [30%]

A handful of exercises will be conducted throughout the term to reinforce course topics and activities the teams are performing on their projects. Details for these exercises and their grading will be provided via myCourses as needed. Weights of assignments towards the final 20% will vary depending on the complexity/effort required.

#### Reading Commentary [30 points within Individual Assignments]

Each in-class topic will be accompanied by reading assignments. Over the course of the semester, I will create several discussion forum topics in the myCourses discussion area in order to support continued discussion (and questions) regarding topics we won't have time to address in-depth during class.

I expect students to make substantive contributions to these discussions throughout the semester. In addition, students will be expected to facilitate internal critique and discussion by responding to each other's posts. Within each topic, you can earn:

- 1 point for creation of an original thread that (a) summarizes ~3 key points from the related readings, (b) how the reading is applicable to the group project, and (c) things you'd have to consider when applying this in the "real-world" (with a focus on items b&c).
- point for a response to another's post with additional insight of some kind (constructively agree/disagree, additional considerations, other references, etc.)

You can earn at most 3 points per topic. To earn the full 10% for this grading element towards your final grade, you'll have to earn 30 points total. Note that you will not be able to view other posts or respond until you have posted yourself on the given topic. You can post/respond to any topic up until the last day of classes.

#### Final Exam [10%]

There will be a single **final exam** given during the semester to assess the student's understanding of and ability to reflect upon the concepts covered in class and used for the project. The final exam time will be scheduled by RIT and is not negotiable. Variances will be allowed only for very good reasons (RIT sports team activities, documented sickness, family emergencies, etc.).

If you have an exam time conflict (e.g. multiple exams at the same time or 3+ exams on one day), you must notify your instructor via email (with a screenshot of the conflict shown in SIS) 3 weeks before the final exam.

#### **Group Project [60%]**

The focal point of the course is a term long project executed by a team of 5-7 students. The goal of the project is to introduce and practice the fundamental team-based software development skills that lead to delivery of a quality game.

Simulating a real-world project is challenging due to the short amount of time teams can meet in person. Significant time will also be required outside of the classroom to meet and work as a team. Time will be allocated during most class sessions for project teams to meet and work. It is critical that you are present for these sessions, as your absence from class adversely affects your team's ability to make progress. It is also equally important for the team to take advantage of this time to interact with their instructor.

#### **Overview & Grading**

The group project will explore the early inception and elaboration phases of a game design and development project of your choice. The goal is to have a working prototype and initial business plan by the end of the semester. The process you will follow, from a planning and task management perspective, is based on Scrum. We will cover the practices and techniques required as the course progresses. Over the course of the semester, you'll complete 5 sprints, each with its own objectives and deliverables:

Sprint	Objective(s)	% of Final Grade (60% total)
1	Team formation and vision	10%
2	Vision refinement and architecture selection	10%
3	Planning and infrastructure setup	10%
4	Prototype completion	15%
5	Construction and business planning	15%

#### **Individual Adjustments**

Everyone on your team will receive a team grade based on the overall performance of the team. Individual adjustments to the team grade will be made based on the level of participation of each team member. Your instructor will assess individual team member participation based on peer evaluations and using evidence from planning boards, team communications, version control repositories, etc.

Participating in the term project is perhaps the most valuable experience you will take from this course. Far more projects fail because of poor collaboration and communication within project teams than they do for any technical short-comings. Becoming an effective team member is a critical career skill and the goal of this project is to gain some experience with effective (and non-effective) teaming practices. The expectation is that each team member will make an honest effort in participating in team activities to the best of their ability. Should non-constructive conflict arise, your instructor will expect the team to first try to resolve issues internally. Beyond that your instructor will intercede as needed to help in resolving team issues.

#### Rules and Additional Information

Assignment Feedback and Grading: It takes time to grade assignments and provide detailed feedback – much more time than students may expect. Large assignments may take up to 3 weeks to be fully graded.

Late Policy: Except in documented extenuating circumstances, late submissions will not be accepted for ANY reason. This is a graduate class and you are expected to manage your time wisely. If you are having problems with an assignment or have an emergency that may make you late in submitting your work, contact me as soon as possible (ideally BEFORE the due date).

**Incomplete Policy:** Incomplete ("I") grades are reserved for cases in which the student is making credible course progress, and then something occurs in the student's life that prevents the completion of the course. Incomplete grades are not a mechanism to delay a failing grade nor are they a means to stave off probation or a suspension. For an instructor to grant an incomplete, credible documentation must be provided at the instructor's or school's request.

**Challenging Grades:** If you challenge a grade, it must be done in a timely manner, within a week of the return of an assignment. Remember that in challenging a grade, the instructor reserves the right to revisit the grading on the entire assignment and may adjust the grade appropriately. This is mentioned not to discourage a student with a legitimate complaint over a grade, but to rather address the often-blatant problem of "point weaseling" on assignments.

At the end of the semester, any questions about the final grading of the course should be raised immediately. Department policy states that a student has one semester to challenge any grade.

**Classroom Etiquette:** There will be times when we will discuss topics and issues in the form of a lecture. During this time in the class, you will be expected to take notes about the material being presented. During the lecture time, you are also encouraged to ask questions about the topics being discussed or the supplemental readings you have completed.

Due to time constraints, it is important that you arrive at class each day prepared to work. If you are late to class, please try to enter the classroom with minimal disruption. Make sure that devices such as cell phones, MP3 players, and other disruptive devices are turned off or silenced. Don't answer phone calls during class.

The computers are for following along with the lecture and doing work. I know we all love games, but don't play games during class. Don't surf Facebook or reddit during class either. It's rude, not to mention disrespectful and distracting to other students.

Don't sleep in class. Sleeping in class is just as bad as missing class. If you are truly too tired to function, stay home that day (or become best friends with coffee).

Name Preferences: If you have a preferred first name and/or pronoun preference, please let me know either in class or by email so I can honor your preference. If you would like MyCourses and your RIT teachers to have your first name preference automatically known, you can change your first name preference through the Registrar's office by completing this form and returning it to that office.

**Missing Class:** There is no formal attendance policy. Many class sessions will have class exercises and activities with submitted work that contributes to the Individual Exercises portion of your grade. If you miss class, you cannot get credit for the exercises.

There will also be class time set aside for term project work. All team members not being present to participate in these team activities will be a detriment to the effectiveness of your project team. Thus, low attendance is likely to be reflected in peer evaluations and thus will have a negative impact on your final grade.

In the case of an illness or unexpected absence, the student should try to communicate with the faculty and their project team in as timely of a manner as possible. When class is missed, it is up to the student to make up work and to acquire any course materials. Absences in any form do not postpone due dates unless agreed upon by the instructor.

**Class Cancellation:** If the faculty cannot attend a class session, students will be contacted via email and cancellation signs will be placed on classroom doors. Explicit instructions for a cancellation will be communicated via your RIT e-mail.

**E-Mail Address:** All official communications should occur between your RIT e-mail address and the faculty's RIT e-mail address. Please check your RIT e-mail daily for important notifications. Furthermore, faculty may not be able to respond to requests that do not originate from a RIT e-mail. Please make sure to use only the email address noted at the top of the syllabus. I do have others associated with RIT, but I do NOT check them regularly!

**E-Mail Communications:** If you have a question or two about a topic or assignment, please email me about it. Always include a subject line and be sure to mention the class name and section. It's also expected that you use complete sentences and punctuation, as well as sign your name.

Announcements and other messages may also be sent via email using the facilities for sending mass email available in myCourses. Since you may request re-grades of work only within a set period from the time that the feedback was provided to you, and course announcements could provide you with important information, it is in your best interest to read your RIT e-mail account daily.

#### Out-of-Class Resources

**Office Hours:** I hold 4 hours of walk-in office hours per week (no appointment necessary). Office hour information is posted at the top of this syllabus. Please make sure that if you need to use office hours, you show up in a timely manner and you come prepared to present your problem to your instructor.

Office hours offer you the opportunity to ask more individual questions about the course material that you may have not had time to have addressed in class. Office hours are held on a first-come first-served drop-in basis. No appointment is necessary to attend office hours. Sometimes office hours become increasingly busy the closer it is to a project deadline. Plan your use of office hours accordingly. Individual appointments may be arranged, if needed, as schedules allow.

**Advisors:** If you have general questions about this course, and you feel you want to talk to someone outside of the instructor, you can always make an appointment with a faculty advisor to discuss issues.

**Other Channels for Help:** It is important to realize that there are number of general help avenues available on campus. The RIT Academic Support Center has several resources for students in terms of assistance with math, science, and writing skills. More information can be found here: <a href="http://www.rit.edu/studentaffairs/asc">http://www.rit.edu/studentaffairs/asc</a>

#### **Accommodations**

RIT is committed to providing reasonable accommodations to students with disabilities. If you would like to request accommodations such as special seating or testing modifications due to a disability, please contact the Disability Services Office. It is located in the Student Alumni Union, Room 1150; the Web site is <a href="http://www.rit.edu/dso">http://www.rit.edu/dso</a>. After you receive accommodation approval, it is imperative that you speak with the instructor so that you can work out whatever arrangement is necessary.

#### Gender Discrimination

RIT is committed to providing a safe learning environment, free of harassment and discrimination as articulated in our university policies located on our governance website. RIT's policies require faculty to share information about incidents of gender based discrimination and harassment with RIT's Title IX coordinator or deputy coordinators, regardless whether the incidents are stated to them in person or shared by students as part of their coursework.

If you have a concern related to gender-based discrimination and/or harassment and prefer to have a confidential discussion, assistance is available from one of RIT's confidential resources on campus (listed below).

- 1. The Center for Women & Gender: Campus Center Room 1760; 585-475-7464
- 2. CARES (available 24 hours/7 days a week) Call or text 585-295-3533.
- 3. RIT Student Health Center August Health Center/1st floor; 585-475-2255.
- 4. RIT Counseling Center August Health Center /2nd floor 2100; 585-475-2261.
- 5. The Ombuds Office Student Auxiliary Union/Room 1114; 585-475-7200 or 585-475-2876.
- 6. The Center for Religious Life Schmitt Interfaith Center/Rm1400; 585-475-2137.
- 7. NTID Counseling & Academic Adv. Services 2nd Floor Lynden B. Johnson; 585-475-6468 (v), 585-286-4070 (vp).

# Academic Integrity

Please review these policies on academic integrity:

• RIT's policy: http://www.rit.edu/academicaffairs/policiesmanual/d080

The Department of Interactive Games and Media does not condone any form of academic dishonesty. Any act of improperly representing another person's work as one's own (or allowing someone else to represent your work as their own) is construed as an act of academic dishonesty. These acts include, but are not limited to, plagiarism in any form or use of information and materials not authorized by the instructor during an examination or for any assignment.

If a faculty member judges a student to be guilty of any form of academic dishonesty, the student will receive a FAILING GRADE FOR THE COURSE. Academic dishonesty involving the abuse of RIT computing facilities may result in the pursuit of more severe action.

If the student believes the action by the instructor to be incorrect or the penalty too severe, the faculty member will arrange to meet jointly with the student and with the faculty member's immediate supervisor. If the matter cannot be resolved at this level, an appeal may be made to the GCCIS Academic Conduct Committee.

If the faculty member or the faculty member's immediate supervisor feels that the alleged misconduct warrants more severe action than failure in the course, the case may be referred to the GCCIS Academic Conduct Committee. The Academic Conduct Committee can recommend further action to the dean of the student's college including academic suspension or dismissal from the Institute.

The following definitions will be used to clarify and explain unacceptable conduct. This is not intended to be an exhaustive list of specific actions but a reasonable description to guide one's actions.

**CHEATING includes knowingly using**, buying, stealing, transporting or soliciting **in whole or part the contents of an** administered/unadministered test, test key, homework solution, paper, project, **software project or computer program**, or any other assignment. It also includes using, accessing, altering, or gaining entry to information held in a computer account or disk owned by another.

**COLLUSION** means the unauthorized collaboration with another person in preparing written work or computer work (including electronic media) offered for credit. Final work submitted by a student must be substantially the work of that student. **Collaboration on an assignment is expressly forbidden unless it is explicitly designated as a group project.** When there is any doubt, a student should consult the instructor (NOT ANOTHER STUDENT) as to whether some action is considered collusion.

Whenever there is any question as to whether a particular action is considered academic dishonesty, the instructor should be consulted.

## Finally...

You're here to learn something new, or to get better at something you already have experience with. I'm here to help you do that. Don't be afraid to ask for help when you need it. It makes both of our jobs easier.

Most topics in this course build on each other. If you don't understand Thing 1, Thing 2 will be that much harder to grasp. Thing 3 relies on 1 and 2. It's easy for these kinds of problems to snowball very quickly. I highly recommend asking for help before things go awry. Admitting you don't understand a new topic isn't admitting failure; it's simply the first step towards actually understanding it.

All information in this syllabus is subject to change. Should anything change, I will let you know in class, on MyCourses and/or via email.

- Changes made 9/8/2018 are highlighted in blue. These include changes to reading commentary requirements/grading + a clarification on the weight of individual assignments and some minor formatting changes.
- Changes made 11/16/2018 to consider the reading commentary as a subset of the individual assignments are highlighted in yellow.