GAM 400 (Fall 2018)

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https://app.acuityscheduling.com/schedule.php?owner=13106517

Course Description – GAM 400

In this course, students focus on preparing their personal portfolio of projects to be ready for a professional job search. This can be a new project to demonstrate a particular professional skill, or taking a previous project to very high level of quality.

Instructor's Notes:

This is an opportunity for students to work on project that are specific to their needs. The goal is to avoid making 'another game', but instead, make something specific to the individual, even if that is within a team setting.

- Students may focus on
  - Portfolio polish for job search
  - Exploring new technology/design they have not experience before
  - Supporting other teams as a technical or design lead (with Instructor permission)
  - Begin and complete a one semester project (with Instructor permission)
  - Continue work on an existing project in a third semester.
  - Begin work on a two semester project that will continue in GAM450
  - Other, with Instructor permission
  - NOTE: four semester projects are NOT recommended, unless you already have a job lined up. Talk to the instructor.

- Focus of the project is on PROFESSIONAL POLISH and completeness, to achieve a technical or design state suitable for inclusion in a portfolio, or as a stepping-stone to a final project in the following semester. Much of the class is about job preparation, including resume writing, portfolio development and networking. Additionally, project focus by the instructor is on ease of use, fun and balance.

- Students may work **solo** (individual), on a **team**, or on a **joint team** with graduate students, GAM400/450, PRJ402/452, GAM300/350, or any CSP 300 or higher. Students working on a GAM375 team project should enroll in GAM375.

- Students may use the latest software and hardware technologies available, with Instructor permission.

  - This includes using web technologies, gaming consoles, mobile devices, commercial physics engines, etc. to implement technical features such as 3D animation, advanced lighting and rendering, full 3D physics, high-performance networking, and advanced AI algorithms.

- Innovation can come from the design, visuals, and/or audio components of the project.

- Additionally, lectures and one-on-one labs will cover important professional skills, including working in a real job, interviewing, preparing resumes, networking, and strategizing for accomplishing one's career goals.

- Participation is REALLY important in this class. Participation is based on meeting with the instructors in the lab OR on one-on-one spots every week or two weeks.

- LECTURES – Lectures are NOT optional! Lectures will be oriented towards topics that a professional game developer may be exposed to, but students are not required to incorporate these topics into the projects. Lectures may be of a technical, design, legal, job preparation or other.

Course Objectives
After completing this course, students will started or finished a capstone project(s). Students will have given several presentations, in which they will be critiqued and be given feedback on presentation skills by faculty and students. Students will work on resumes, interview skills and techniques, and participated in several mock interviews.

The overall goal is to work on a passion project.

Textbooks, References, Course Materials Required
None

Grading Policy
Overall, **each** student will receive a total progress grade of 0-60. The break point at the end of each month is approximately 40%. Not meeting this break point means it will NOT be possible to pass the class. This score is assigned to EACH student individually, not the group as a whole. If a student is not present as part of a team meeting, that student receives a 0.

Meetings will occur every other week (bi-weekly in Fall and Spring, unless the student (team) requests a weekly meeting). Each meeting is valued at an A, B, C or Fail. Not showing up is a Fail (see the attached spreadsheet).

The additional 40 points is a combination of the functional specification, a draft research paper and the final research paper plus the final submission.

A student who has received a 40 or lower for their BASE progress score can ONLY pass the class by submitting A level work on their research and their research paper. Examples of A level work will be provided on the moodle site.

1. Scale:

A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D	67-69%
F	66% and below

2. Standards:

Your final grade for the course will be calculated according to the breakdown listed above. When assessing the quality of your work, the following standards apply:

A: The work is outstanding and meets professional standard on all levels.
B: The work meets a introductory professional standard on most levels.
C: Average student work.
D: Substandard work, although it shows some understanding of the basic principals.
F: Unacceptable work.

3. Late Work
All work will be due at date and time on the moodle site. Late work will be accepted, but with a penalty: 5% (half a grade) for every day delayed.

NOTE: Senior year has many concerns. Make sure you keep your instructor aware of any issues that might stand in your way of completing your project or meeting your deadlines.

GRADING BREAKDOWN:

(6) one-on-ones worth 50 pts (meeting with instructor(s) every other week)
(1) Presentation worth 10 pts

	60 pts
(1) Functional Spec	5 pts
(1) Draft Research	10 pts
(1) Research Paper	100 pts
(1) Final Submission	100 pts
	215 pts, normalized to 40 pts
(1) GDC/TED talk paper	5 pts (1/2 grade change)

60+40+5 = 105 pts possible

Grading – Attendance and Participation

- Attendance will have a direct impact on the final grade. Students are allowed to miss up to 4 hours of class (lab and/or lecture) with no deduction to their grades. Thereafter, for every two hours of lab class/lecture class missed, the student's grade will automatically be reduced by half a grade. Note that students who are more than 20 minutes late for a class will be considered absent.
- INTERVIEWS can be excused.
- Students must come in each week and meet with the instructor in the assigned classroom. **Signing in and leaving without staying for the lecture or without meeting will be counted as an absence!**
- All students are expected to participate in all presentations – this class is organized as a company, and you are expect to arrive early for all presentations, offer feedback and suggestions, as well as give your own presentation and then stay for all presentations following yours. Leaving early will be noted and included in the grading. You will be assigned a time to arrive and to leave – generally figure an hour for your presentation AND to listen/participate in other presentations.
- FRIDAY attendance in labs is mandatory – however, additional meeting times for more one-on-one time with the instructors may be arranged.

Grading – weekly meetings

The rubric for each weekly/bi-weekly meeting is general. Each meeting should focus on the following.

	Failing (0)	Passing Or N/A (5)	B level (8)	A level (10)
How much progress has the team (student) made since the last meeting? (NONE is a failing grade)	Very little	Good	Expected	Excellent
Is the project progressing?	Missing	Meeting	Expected	surpassing
Technology:				
Did all the necessary technology get done to the level required for the delivery?	No	basic	Expected	surpassing
How is the student (and team) dealing with the problems?	No	basic	Expected	surpassing
Design:				
How is the UI or interface/interactivity?	No	basic	Expected	surpassing
How is the feedback?	No	basic	Expected	surpassing
Art/Audio:				
Does everything have art and audio, at least as placeholders?	No	basic	Expected	surpassing
Does the art/audio suit the project's needs?	No	basic	Expected	surpassing
Tools:				
How easy are the tools developed to use?	No	basic	Expected	surpassing
UI:	No	basic	Expected	surpassing
TCRs:	No	basic	Expected	surpassing

Grading – Assignments

A **FUNCTIONAL SPECIFICATION** will be required in this class, where the student must research their project and write out a summary of the work they are attempting, as well as marketing comparison research.	one PER TEAM	5 PTS
A **MILESTONE CHECKLIST**, This will be DRAFTED by the instructor, and then reviewed and modified by each team/student	one PER TEAM	(not graded, but the basis of YOUR week 4, 8 and 11 grading)
A **DRAFT RESEARCH PAPER** is submitted to show the progress on the research done by the students.	One per individual	10 PTS
A **RESEARCH PAPER** that summarizes the work achieved will be required at the end of the semester.	One per individual	100 pts
Final Project submission	One submission per TEAM	100 pts
A **PORTFOLIO** and **RESUME** is not required, but can be reviewed.	(not graded)	

Grading - Project Milestones

There is a TCR for GAM400 that is unique to this course, given the variations between building your own engine, using an existing engine, making a technology demo, making a mobile game, etc. Be sure to check this EARLY to verify your requirements.

Changing Teams

Students can change teams and jobs with no penalty up until the game concept presentation. At that presentation, the teams and jobs are locked for the rest of the semester. If you want to change teams (or want to kick someone off your team), you must talk to an instructor and YOUR TEAM may receive a half-grade deduction on the final project score.

SCHEDULE MAY CHANGE AT THE DISCRETION OF THE INSTRUCTOR

TOPICS:

- **Job search** (physics programmer, game play programmer, AI programmer, level designer, etc. Guest speakers throughout the semester will discuss what they look for in their field, as well as questions/answers they expect at an interview. phone interview, in person interview, exams and tests
- **Portfolios**: showcasing your skills
- **Core Game Mechanics** – game design review and advanced game design
- **Production** – tools and skills for producers and non-producers
- **Notes from the Front Lines**: what it's like out there
- **Business Planning** - starting a company, the financials, leadership and ownership
- **Negotiations, Salaries and More**
- **Technology** – these topics will vary based on the guest lecturer, but the schedule will likely include MMO development, databases, iPhone dev, facebook dev and more
- **Unity**: Best Practices and/or tricks from the field
- **State of the Industry**

Tentative Weekly Schedule

Week 1	Wednesday – Intro to Semester; set up one-on-ones THURSDAY/FRIDAY – meet with instructor and write CHECKLIST
Week 2	Job searching – Portfolios and What We look For in an applicant Lab/one-on-ones – **SUBMIT CHECKLIST**
Week 3	Entrepreneurship – starting a business Lab/one-on-ones
Week 4	In Game Metrics and Data Collection for Executives Lab/one-on-ones **Individual Functional Specs Due**
Week 5	**FRIDAY – (ROOM TBD) – POWERPOINT presentations of concepts/work**
Week 6	Level, Game, Tool Design: User Centric Design Ideas Lab/one-on-ones
Week 7	**DRAFT RESEARCH PAPER DUE** Ethics in our Industry – Where do we go from here? Violence Lab/one-on-ones
Week 8	**MIDTERM GRADES SUBMITTED INTO SRS** Ethics in our Industry – Where do we go from here? Gender Lab/one-on-ones
Week 9	Ethics in our Industry – Where do we go from here? Games for Social Issues Lab/one-on-ones
Week 10	**ALL WEEK – one-on-one presentations at your lab space.**
Week 11	Monetization – what do we need to think about? Lab/one-on-ones
Week 12	Gamification Lab/one-on-ones – **GDC VAULT talk due for GAM400 students**
Week 13	The Future of Games… Mobile? Social Media? Location Based? Lab/one-on-ones
Week 14	**SUBMISSION Due – S: DRIVE 11:55 PM FRIDAY** **Research Paper Due – MOODLE 11:55 PM FRIDAY**
Week 15	**FINALS WEEK – NO FINAL**

GUEST LECTURERS MAY INITIATE CHANGES TO THE SCHEDULE- Much of this course is dedicated to job search and employer outreach, however, expect additional lectures on contract law, advanced technology and current industry trends.

Classroom Rules:

1. Each student must contribute a significant portion of code to their game. The code may be used in tool creation as well as the game engine.
2. Senior projects can use third-party software tools to build their game: for example, the Aegia PhysX SDK. Teams must get permission from the instructor to use these tools.
3. All game assets – art, code, audio – must be created by current DigiPen students or drawn from approved libraries. If you have any questions, check with the course instructor.
4. All code files must contain the correct DigiPen copyright and primary author's name in the header. All code should be thoroughly commented.
5. Students are not permitted to work on other projects during lectures.
6. Students should have their cell phones turned off during class. Please check with the instructor if you are expecting an important phone call.
7. If there is a problem with a teammate, please talk to the instructor as soon as possible. A team that wishes to drop a member who is not getting their work done must do so no later than the end of week four, after speaking with the instructor and getting his approval.

Academic Integrity Policy

Cheating, or academic dishonesty in any form, will not be tolerated in this course. Penalties for cheating may include receiving a zero on an assignment, or a failing grade in the course, or even expulsion from DigiPen. For further details, please consult the DigiPen Academic Integrity Policy. Note that in a team project class, working directly with your teammates, or even with other teams, is not cheating (and is highly encouraged). However, each student is required to accurately inform the instructors of the exact work they personally did on the project.

Disabled Student Services

Students with physical, psychological or learning disabilities that affect their ability to perform major life activities associated with this class may be eligible for reasonable accommodations under the Americans with Disabilities Act. If you have a documented disability please contact the Disability Support Services office to arrange for accommodations.

