

ECE 101

Introduction to ECE

Rich Compeau

Introduction

Outline

- In this presentation we will cover:
 - **Syllabus review**
 - **Overview of the SOE and ECE programs**
 - **How to Survive the Program**
 - **Entrance Survey (1st Assignment)**

SYLLABUS REVIEW



INTRODUCTION

UNM School of Engineering

- Five Departments (w/ 105 faculty) offer BS degrees:
 - Chemical and Nuclear Engineering
 - Civil Engineering
 - Computer Science Engineering
 - Electrical & Computer Engineering (ECE)
 - Mechanical Engineering
- Many student programs available at the SOE level (www.soe.unm.edu/Student_Programs/ESPO.html).
- Numerous MS and PhD Programs within each of these departments.

UNM ECE Department

- Two undergraduate programs:
 - Computer Engineering (CompE)
 - Electrical Engineering (EE)Both are ABET accredited.
- Full-time academic advisor for all ECE undergraduates:
Ms. Christina Garcia, Undergraduate Advisor
ECE Bldg. Rm. 115
277-1435

ECE Department Admissions

- You may apply for admission to the department when you have:
 - Completed 18 hours of specific freshman year technical elective courses with a 2.5 or better GPA.
 - Completed 26 hours of coursework applicable to a ECE degree with a 2.2 or better GPA.
 - A “C” or better grade in all of the above coursework.
 - A “C” or better in ENGL 101

University College Students

- If you are in the University College (*NOT the pre-major program*)...
- You should talk to Christina for relevant advisement – the sooner the better!

EE Curriculum

- Please review this curriculum in the Undergraduate Handbook.
- EE Curriculum Highlights:
 - 129 hours total
 - 18 Math / 14 Science
 - 55 ECE Required/Completeness
 - 6 ECE Track Elective / 9 ECE Tech Elective
- Planning & Advisement are important!

CompE Curriculum

- Please review this curriculum in the Handbook.
- CompE Curriculum Highlights:
 - 128 hours total
 - 21 Math / 11 Science
 - 54 ECE Required/Completeness
 - 6 ECE Track Elective / 9 ECE Sr. Elective
- Planning & Advisement are important!

CompE: Integrated Film & Digital Media Option

- This program is designed to offer students an IFDM degree that can be customized to meet a variety of interests and needs.
- The curriculum can be structured to serve needs such as:
 - Computer-based applications like simulations or animation
 - Production level courses that focus on directing, writing or producing
 - Business applications that emphasize the legal, marketing and accounting aspects the digital film industry

CompE: IFDM Option

- To be accepted as a pre-major student in the IFDM program, students have to apply in early spring.
- This is a separate application from the general UNM Admissions application. Separate deadlines apply.
- All students admitted to the program have to complete a *University core curriculum* that includes subjects like Math, English and Science.
- Students will also have a set of ten *Common Core courses* for the IFDM program regardless of which degree they want to pursue. These IFDM core classes are taken in order from the time a student is admitted as a pre-major into the program. Check out:
http://finearts.unm.edu/pdf/IFDM_Course_Descriptions.pdf
- **Additional specific courses** are required for selected *degree concentrations* that are determined by each college.

3+2 BS/MBA Program

- Offered by the ECE Department in conjunction with UNM's Anderson School of Management (ASM)
- Suited for engineers who wish to earn an MBA
- Enables School of Engineering undergraduates to receive their baccalaureate degree in engineering in four years and then complete requirements for an MBA from UNM's Anderson School of Management during a fifth year of study.
- Requires completion of some ASM courses during the undergraduate engineering program, and students earn dual credit for some required courses that count toward both the ECE and ASM degrees.
- It is recommended that students complete Business Calculus and Microeconomics before applying to the program.

3+2 BS/MBA Program

- For the first three years of undergraduate study, the student pursues a normal ECE curriculum.
- During the junior year (90 hours), the student applies for admission to the MBA program at ASM. ASM directs that students should not take any management classes prior to their acceptance into the program, with the exception of MGMT113 (Introduction to Management).
- In the senior year, the student begins the first year of the MBA program and also completes the requirements for a bachelor of science degree in EE or CompE.
- In the fifth year of study the student completes the second year of the MBA program.



CURRICULUM REVIEW

Surviving the Program

- What do you do if you're struggling in a class... and you might even fail?
 - **Grades lower than 'C' not accepted in engineering!**
- There are options available to you – use them wisely!
 - Drop
 - Change Grading Option
 - Withdrawal
 - Grade Replacement

Drop

- If a class is going badly (worse than 'C')
 - **Don't fail** – drop the class
 - **Take it again in the future when:**
 - You're better prepared (lighter load, math, etc)
 - Maybe some of it has sunk in
 - It's being taught by a different professor
- *Know the relevant drop dates.* For Fall 2011 semester, **September 9th** is last day to drop **with a refund** and **without a grade**



Change Grading Option

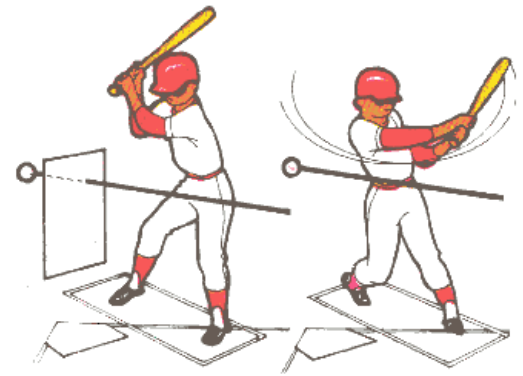
- Change your grading option to CR / NC
- Last day to change grading option is **Sep. 16th**
- You'll need to take the class again but you won't have a bad grade on your transcript
- *Note that ECE permits **up to 9 CR hours** for Humanities, Social Sciences, Fine Arts & Second Language electives;
...all others must be taken for grade*

Withdraw



- Withdrawing from a class can protect your GPA
- **Dates for Fall 2011:**
 - November 11th **without** Dean's approval
 - December 9th **with** Dean's approval
- You will earn a **WP** (Withdrawal-Pass) or **WF** (Withdrawal-Failure)
- Earn the WP and take the class again
- But... use these wisely! ***(Three Strikes Rule)***

“Three Strikes” Rule



- All courses required for ECE graduation must be successfully completed **within 3 attempts**
- **Attempts are counted as:**
 - Letter grade recorded (includes drop w/grade)
 - Withdrawals: WP, WF, WNC
 - CR or NC
 - I or Audit
 - Transferred credits
- If you don't earn a 'C' or better at the end of your third attempt - **you're out**

Grade Replacement

- Okay, so you got a bad grade... it happens. 😞
- UNM allows up to **12 hours** of grade replacement:
 - You take the class again
 - The higher grade is recorded on your transcript (but the old grade is also shown with a code)
 - Only one replacement allowed for each course
 - **NOT an automatic process** – form in ECE Rm.115
 - CR, NC, PR, WP, W not replaceable
 - Transferred credits not replaceable



ENTRANCE SURVEY

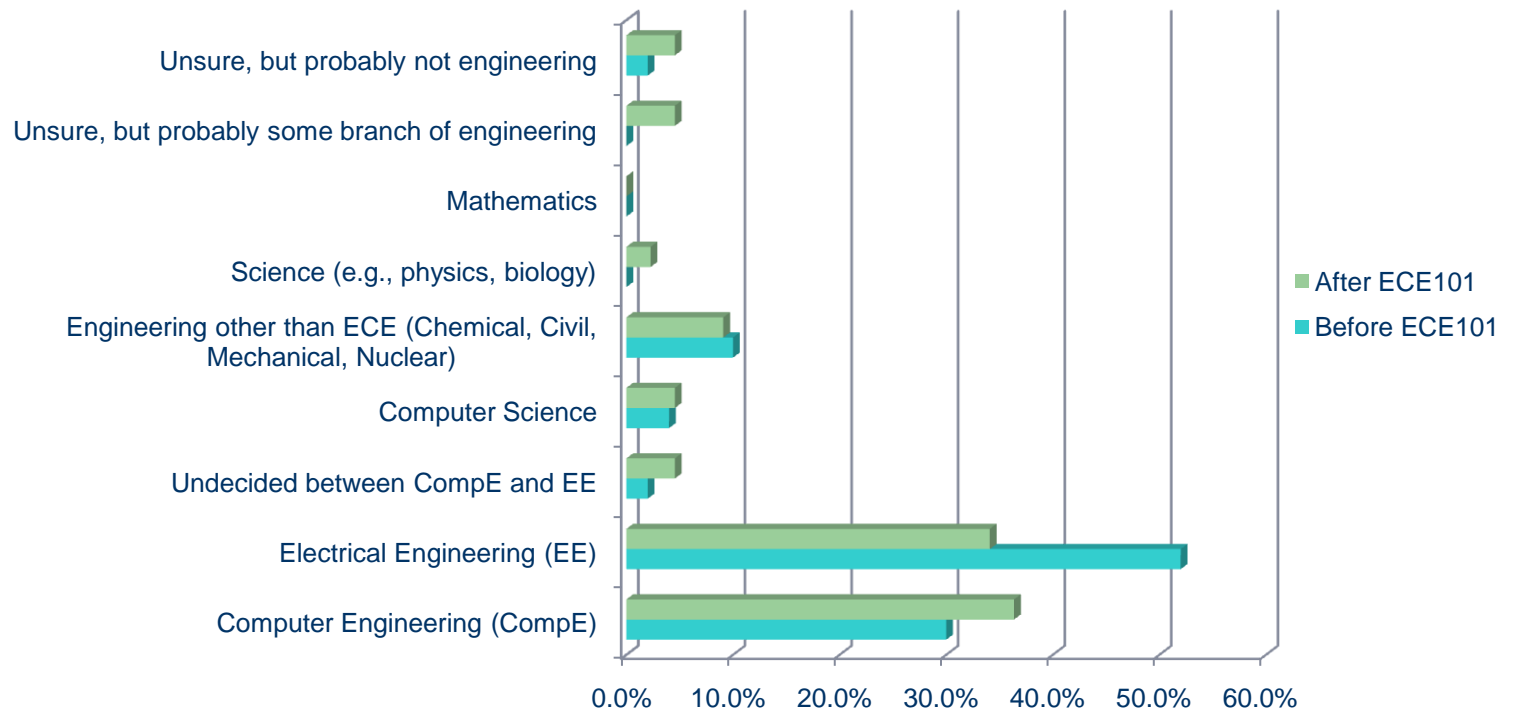
(YOUR 1ST ASSIGNMENT)

Entrance Survey

- Counts as TWO assignments
- Due at the beginning of next class (Wed. 8/31) in hardcopy form
- Overview of Survey

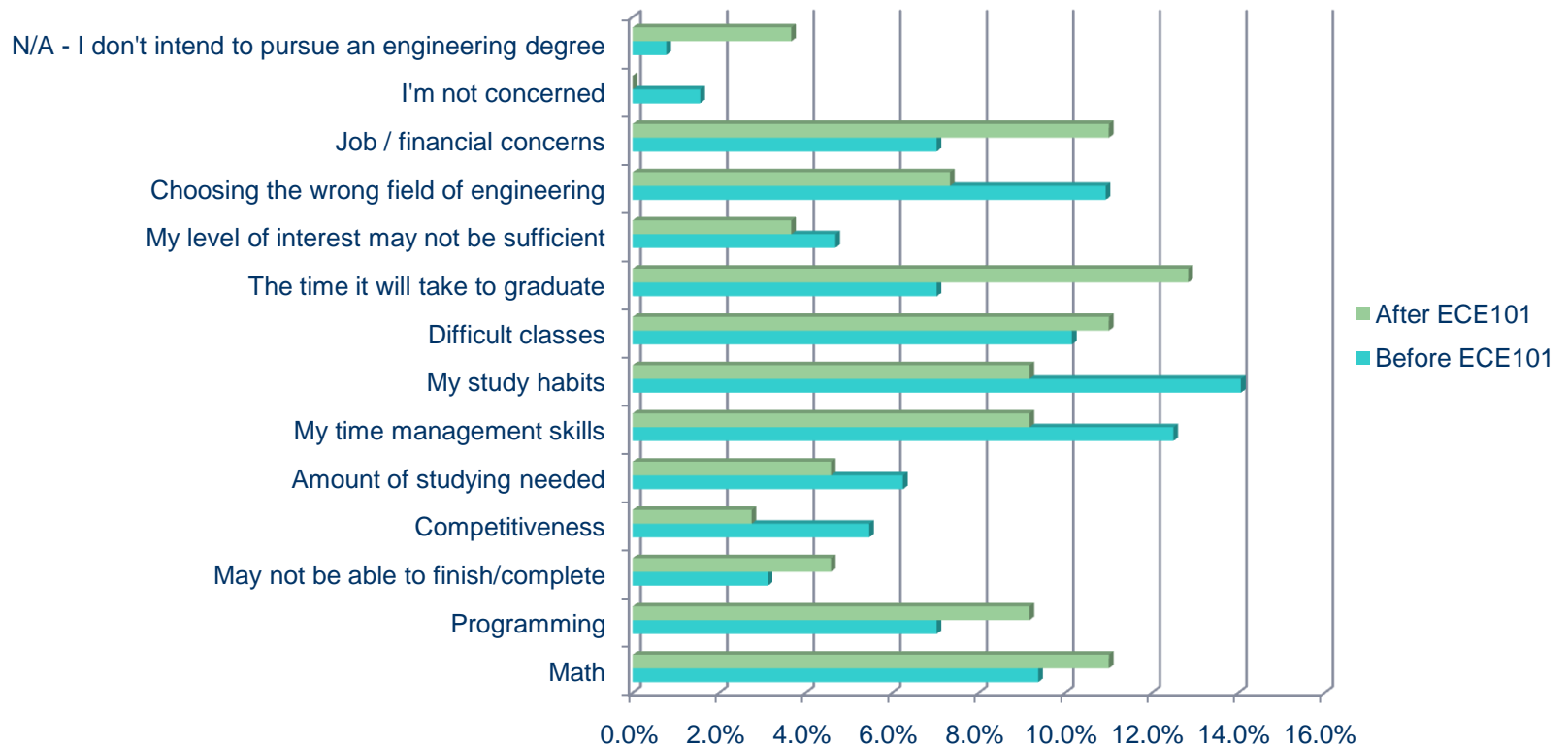
Important Survey Elements

Which of the following best describes your intended major?



Survey, continued

What worries or concerns you most about pursuing an engineering degree?



Questions?

Next week:

Earning an ECE Degree: Keys to Success